A sectional cargo ship

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Inventor:	
Applicant:	BYLO JOHN JOSEPH
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- European:	B63B3/08
Application number:	GB19670047999 19671021
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Abstract of **GB1145435**

1,145,435. Sectional cargo ship. J. J. BYLO. 21 Oct., 1967, No. 47999/67. Headings B7A and B7M. A ship is formed of two freely interchangeable halves, one half comprising an elongated cargo base 10 (with a vertical plate 13 at its aft end) having an upwardly facing open top, and a stern 14 (with a plate 15 at its forward end) including motive power for the ship, the cargo base and stern being attached to each other (via plates 13, 15), the other half comprising an elongated cargo top 17 (with a plate 18 at its forward end) having a bottom contour formed complementarily to the upwardly facing open top of the cargo base, and a bow 19 (with a plate 20) attached to the cargo top (via plates 18, 20) the halves being so constructed and arranged that one half of any ship can be used with the complementary half of any other ship without regard to variations in their configurations. The halves are connected and separated by varying the amount of water within the interior of the cargo base 10 by means of a motor 11 connected to a pair of pumps 12 to control the vertical movement of the cargo base with respect to the cargo top.

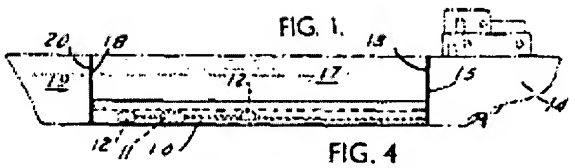

FIG. 1.

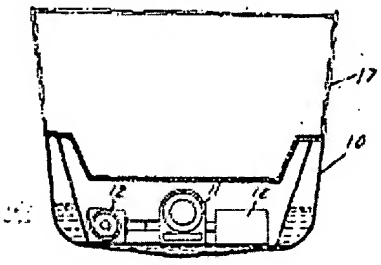

FIG. 4

1,145,435

DRAWINGS ATTACHED

1,145,435

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No. 47999/67.

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Int. Cl.:—B 63 b 3/08

COMPLETE SPECIFICATION

A Sectional Cargo Ship

I, JOHN JOSEPH BYLO, of 7272 Willoughby Avenue, Los Angeles, California 90046, United States of America, a citizen of the United States of America, do hereby declare the invention for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a cargo ship. The primary object of the invention is to provide a cargo ship and cargo handling method in which the design of the bow and stern of a ship can be varied without affecting the cargo handling operation. The cargo ship has a pair of standard cargo carrying members. These members comprise a standard cargo bottom and a standard cargo top. To the standard cargo bottom, a ship builder may attach any desired shape or type of stern and operating engine. To the standard cargo top, a ship builder may attach any desired shape or type of bow.

In use, since the top and bottom are standard, any type of stern may be used with any type of bow. Each ship is formed in two halves, each of which is interchangeable with the complementary half of any and all other ships.

My invention thus provides complete interchangeability, while at the same time allowing the ship owner complete freedom of design as to speed, motive power, shape and type of stern and bow, without such variations affecting the interchangeability of the cargo carrying members.

According to the present invention, therefore, a cargo ship is formed of two freely interchangeable halves, one half of said ship comprising an elongated cargo base having an upwardly facing open top. The stern which includes motive power for the ship has its forward end attached to the cargo base to form one-half of the ship. An elongated cargo top has a bottom contour formed complementarily to the upwardly facing open top of the cargo base. A bow is attached to the cargo top to form the other half of the ship. The halves are constructed and arranged so that one half of any ship can be used wth the complementary half of any other ship, without regard to variations in their configurations.

Referring to the drawings,

Fig. 1 is a side elevational view of my cargo ship in use;

Fig. 2 is a side elevational view of the forward half of the ship, comprising the bow and cargo top;

Fig. 3 is a side elevational view of the aft half of the ship, comprising the cargo base and stern;

Fig. 4 is a sectional view of the assembled ship, taken on line 4 — 4 of Fig. 1;

Fig. 5 is an exploded perspective view of the aft half of the ship, showing how the stern is formed separately and then attached to the cargo base;

Fig. 6 is an exploded perspective view of the forward half of the ship, showing how the bow is formed separately and then attached to the cargo top.

In the drawings, the standard or fixed parts of the structure are shown in solid lines and the variable parts in phantom lines.

A preferred embodiment which has been selected to illustrate my invention comprises an elongated cargo base 10, which is substantially U-shaped in cross section, with an upwardly facing open top. The cargo base 10 has a hollow interior which is adapted to hold a quantity of water, which may fill the bottom and which may extend upwardly along the sides.

Mounted within the hollow interior of the cargo base 10 is a motor 11, which is connected to a pair of pumps 12. The pumps 12 are connected to suitable inlets and outlets and are so constructed and arranged as to remove water from or add water to the interior of the cargo base 10.

[Price 4s. 6d.]

By controlling the amount of water within the cargo base 10, it is possible to control the height of the cargo base 10 relative to the outside level of the water in which the ship is floating. The cargo base 10 can thus be moved vertically for the purpose of connecting with or separating from a cargo top, in the manner disclosed in my U.S. Patent No. 2,371,149 issued March 13, 1945.

Attached to the stern end of the cargo base 10 is a substantially square plate 13. The plate 13 is standard and is preferably identical in all ships constructed in accordance with my invention. The cargo base 10 is also preferably standard, particularly insofar as the contour of its upwardly facing open top is concerned, so that it will receive and fit any cargo top.

A stern 14, which includes suitable motive power for propelling the ship, is attached at its forward end to a plate 15. The plate 15 is also standard and is preferably identical in all ships constructed in accordance with my invention. The plate 15 is preferably furnished to the ship builder, who can attach it to a stern 14 of any shape or type and using any motive power designed by the builder.

The plate 15 is formed complementarily to the plate 13 and is attached thereto, to join the stern 14 and cargo base 10 together to form one half of the ship. The stern 14 and cargo base 10 are never separated during use of the ship.

The other half of the ship comprises a cargo top 17, the lower part of which is formed complementarily to the upwardly facing open top of the cargo base 10, so that the bottom of the cargo top 17 nests within the cargo base 10. The shape and all of the other characteristics of the upper portion of the cargo top 17 may be varied by the builder of the ship, provided only that the bottom contour must be suitable to fit within the standard cargo base 10.

Attached to the forward end of the cargo top 17 is a plate 18, which is also standard and which is preferably furnished to the ship builder. A bow 19 of any desired configuration is constructed by the ship builder and attached to a plate 20, which is also standard and which is preferably furnished to the ship builder. The plate 20 is formed complementarily to the plate 18 and is attached to it to join the bow 19 to the cargo top 17 and form the other half of the ship.

It will thus be noted that the ship builder is provided with an almost unlimited range of variations, while at the same time the two halves of any ship are always formed so that they are freely interchangeable with the two halves of all other ships.

Each ship comprises two freely interchangeable halves. One half comprises the stern and cargo base, while the other half comprises the bow and cargo top. These halves are connected to and separated from each other by varying the amount of water within the hollow interior of the cargo base in order to control the vertical movement of the cargo base with respect to the cargo top.

WHAT I CLAIM IS:—

1. A ship formed of two freely interchangeable halves, one half of said ship comprising an elongated cargo base, said cargo base having an upwardly facing open top, a stern including motive power for said ship, the forward end of said stern being attached to said cargo base to form one half of said ship, an elongated cargo top having a bottom contour formed complementarily to the upwardly facing open top of said cargo base, and a bow attached to said cargo top to form the other half of said ship, said halves adapted to be brought together and separated, said halves being constructed and arranged so that one half of any ship can be used with the complementary half of any other ship, without regard to variations in their configurations

2. A ship as claimed in claim 1, in which a vertically directed plate is fixedly attached to the stern end of said cargo base, the forward end of said stern being attached to said plate, and in which a vertically directed plate is fixedly attached to the forward end of said cargo top, the bow being attached to said plate.

3. A ship as claimed in claim 1, in which said ship includes a first vertically directed plate fixedly attached to the stern end of said cargo base, a second vertically directed plate fixedly attached to the forward end of said stern, said first and second plates being connected to each other to connect said stern permanently to said cargo base, a third vertically directed plate fixedly connected to the forward end of said cargo top, a fourth vertically directed plate fixedly attached to the stern end of said bow, said third and fourth plates being connected to each other to connect said bow permanently to said cargo top.

4. A ship as claimed in claim 2 or 3, in which said bow and stern are of variable configuration and all of said plates are of standard fixed configuration, so that a stern of any configuration can be attached to said cargo base and a bow of any configuration can be attached to said cargo top.

5. A ship as claimed in claim 2, 3 or 4, in which the upper part of said cargo top is of variable configuration and at least the lower part of said cargo top and the upper part of said cargo base are of standard fixed configuration, so that any two ship halves can be brought together by bringing said cargo top into engagement with said cargo base to form a complete ship, without regard to the configuration of the variable parts of both halves of said ship.

6. A ship constructed substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

POTTS, KERR & O'BRIEN.

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Fig. 1.

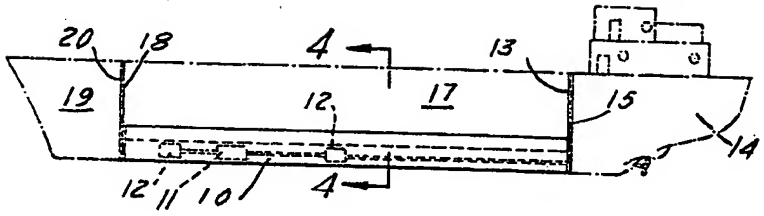


Fig. 2.

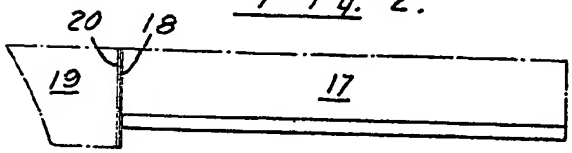


Fig. 3.

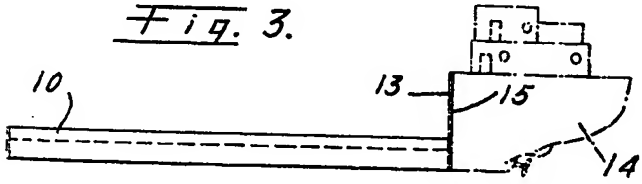
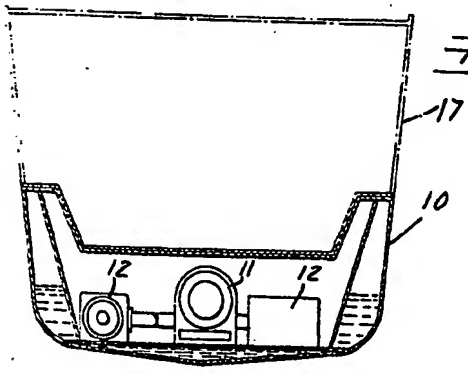


Fig. 4.



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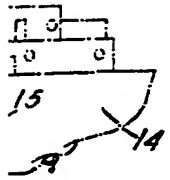
Sheets 1 & 2



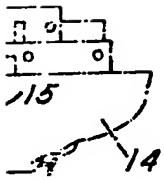


Fig. 4.

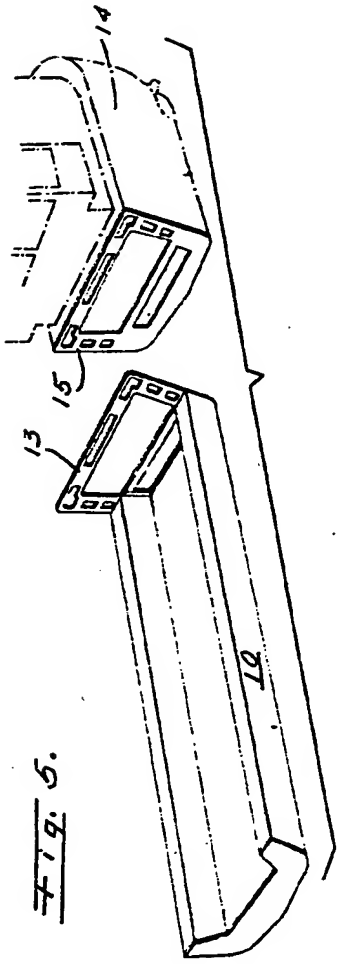


Fig. 5.

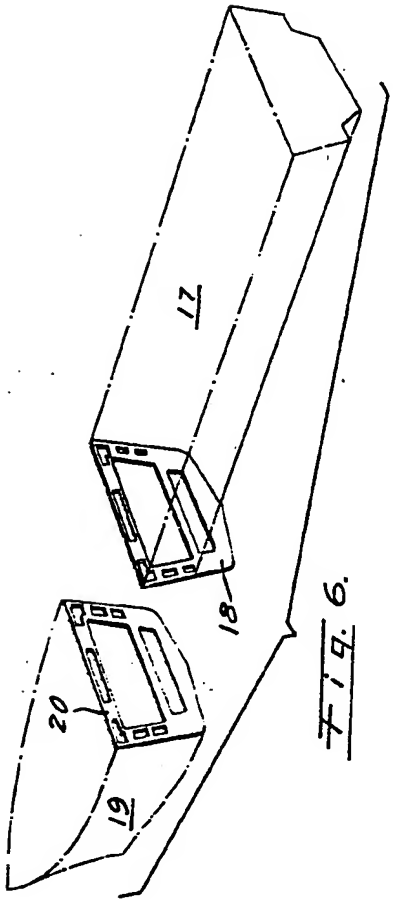


Fig. 6.

1145435 COMPLETE SPECIFICATION
2 SHEETS This drawing is a reproduction of the Original on a reduced scale
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Fig. 1.

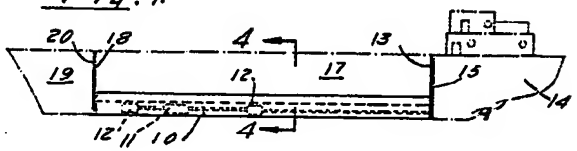


Fig. 2.

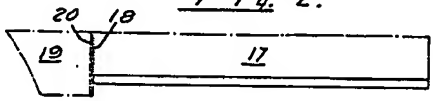


Fig. 3.

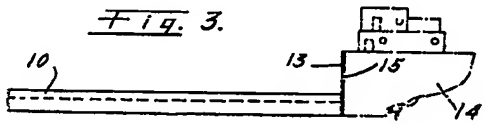
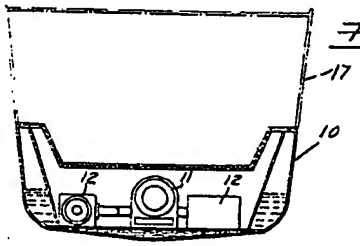


Fig. 4.



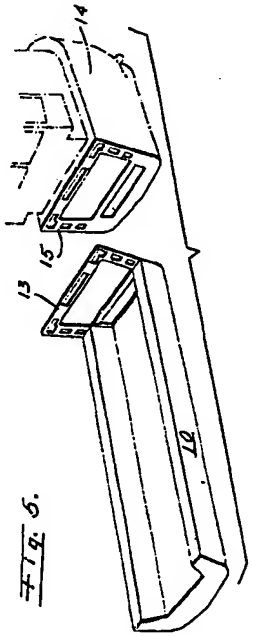


Fig. 5.

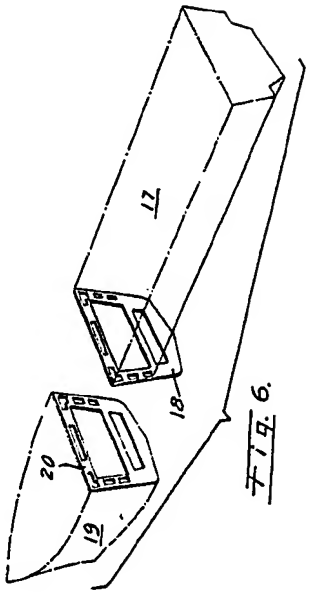


Fig. 6.